

103.4 - Semiconductor Thin Film for the Composition of Thin Films

Standard Reference Material SRMs 2841 and 2842 are intended for use as a reference standard for analytical methods that measure the composition of thin films, such as electron microprobe analysis (EMPA), photoluminescence (PL), auger electron spectroscopy (AES) and X-ray photoelectron spectroscopy (XPS). The SRM consists of an epitaxial layer of  $\text{Al}_x\text{Ga}_{1-x}\text{As}$ , 3µm thick, on a 1 cm x 1 cm square of GaAs substrate. The semiconductor chip is attached with carbon tape to a 2.5 cm diameter stainless steel disk for labeling and handling.

For further information see [SP 260-163](#)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	2841	2842
Description	Semiconductor Thin Film: $\text{Al}_x\text{Ga}_{1-x}\text{As}$ Epitaxial Layers (Al mole fraction $x$ near 0.20)	Semiconductor Thin Film: $\text{Al}_x\text{Ga}_{1-x}\text{As}$ Epitaxial Layers (Al mole fraction $x$ near 0.30)
Unit of Issue	(disk)	(disk)
Al ( $x$ in $\text{Al}_x\text{Ga}_{1-x}\text{As}$ )	0.20	0.30

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only